

REMARKS

This Amendment is in response to the Office Action mailed on April 15, 2005. Claim 1 has been amended to include the limitation of claim 4. Accordingly, claim 4 has been cancelled. Claims 1-3, 6-8 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Shintani et al. U.S. 6,651,678 ("Shintani"). Claims 4 and 5 are rejected as being obvious by Shintani, under 35 U.S.C. 103(a). Claims 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1-12 are pending in this action.

102(e) Rejections:

Claims 1-3, 6-8 and 12 are rejected as being anticipated by Shintani. These rejections are traversed. Claim 1 has been amended to include the limitation of claim 4 and therefore the 102(e) rejection of claim 1 is now moot. Claims 2, 3, 6-8 and 12 depend from independent claim 1 and therefore are not anticipated by Shintani for at least the same reasons. Applicants do not concede the correctness of these rejections.

103(a) Rejections:

Claims 4 and 5 are rejected as being obvious by Shintani. Claim 1 includes the limitation of cancelled claim 4, which is directed at a method of manufacturing a semiconductor device "wherein the second etching step is executed at an in-chamber pressure of 2 mTorr or less." Applicant respectfully traverses these rejections.

As correctly noted by the Examiner, nowhere does Shintani disclose that "the second etching step is executed at an in-chamber pressure of 2 mTorr or less." Moreover, the prior art does not suggest that the second etching step be executed at in in-chamber pressure of 2mTorr or less. Shintani discusses that each etching process, including "the main etching process," "the first overetching process," and "the second overetching process," be conducted at "the conditions of gas pressure = 3 mTorr." (Column 5, lines 39-42, lines 47-48 and lines 53-56). Shintani does not suggest operating the etching "processes" at various or distinct pressures other than at a "gas pressure = 3 mTorr," (Column 5, lines 39-42, lines 47-48 and lines 53-56). The present application, however, discusses on page 6, lines 27-30 that "[i]f the second etching step is executed at a lower pressure than a pressure in the first etching step, moreover, a mean free step

is also prolonged so that it is possible to carry out the etching while protecting a thin dielectric film on the surface of the substrate." Moreover, Shintani does not suggest the various affects on "the rate and quality of the plasma etching process" by altering the pressure in which the etching "processes" take place. As discussed in the present application, "[i]f the second etching step is executed at an in-chamber pressure of 2 mTorr or less, furthermore, a plasma density is decreased and a damage on the surface of the substrate is reduced. Consequently, a surface protecting property can be enhanced," (page 6, lines 30-page 7, line 3).

The motivation to modify the prior art to provide the claimed invention cannot come from applicant's application. Examiner states that it is "obvious to employ any of a variety of different etch process conditions in the etching process taught above *including those which are specifically claimed by the applicant*." The Examiner, however, fails to show any basis for this discussion in Shintani or in any other prior art.

Further, the Examiner states that "the selection of particular values for these variables would not necessitate any undo experimentation, which would have been indicative of unexpected results." However, obvious to try a modification of the prior art is not sufficient motivation to modify the prior art. Again, Shintani fails to discuss any motivation for altering the "conditions" for the etching process, including the pressure. Accordingly, the limitation of cancelled claim 4, now found in claim 1 is not obvious under Shintani. Claims 2-3 and 5-12 depend from claim 1 and therefore are not obvious by Shintani for at least the same reasons.

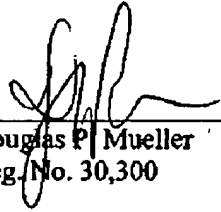
CONCLUSION

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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